

Title (en)
PROCESS AND PLANT FOR THE PRODUCTION OF SULFURIC ACID

Title (de)
VERFAHREN UND ANLAGE ZUR HERSTELLUNG VON SCHWEFELSÄURE

Title (fr)
PROCÉDÉ ET INSTALLATION DE PRODUCTION D'ACIDE SULFURIQUE

Publication
EP 4168358 A1 20230426 (EN)

Application
EP 20733965 A 20200618

Priority
EP 2020066982 W 20200618

Abstract (en)
[origin: WO2021254627A1] A process and its relating plant for producing sulfuric acid by catalytic oxidation of SO₂ to SO₃ and subsequent absorption of the SO₃ in concentrated sulfuric acid in an intermediate and a final absorber stage. Therein, the intermediate absorber stage features a pre-absorber and a post-absorber. These two absorbers arranged such that the not-absorbed SO₃ leaving the pre-absorber is supplied to a post-absorber and such that the sulfuric acid leaving the post-absorber is split into two streams of which the first stream is recirculated back in the pre-absorber and the second stream is at least partly passed into the post-absorber. The first stream is uncooled directly injected into the pre-absorber with a temperature between 80 and 200 °C, preferably between 100 and 150 °C and the second stream passes a cooling and is at least partly fed into the post-absorber with a temperature between 60 and 90 °C.

IPC 8 full level
C01B 17/765 (2006.01); **C01B 17/80** (2006.01)

CPC (source: EP)
C01B 17/765 (2013.01); **C01B 17/806** (2013.01)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2021254627 A1 20211223; EP 4168358 A1 20230426

DOCDB simple family (application)
EP 2020066982 W 20200618; EP 20733965 A 20200618